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P1  
1. In a signal processing system,  
a plurality of receiver/distribution means for  
receiving programming from a program source and for inputting  
said programming to a switch means and a plurality of detector  
5 means,

P1  
a switch means for receiving output from said  
plurality of receiver/distribution means, said switch means  
being capable of directing a selected portion of said  
programming received from one or more said

10 receiver/distribution means to an associated output device,

P1  
a plurality of detector means for detecting control  
signals respecting said programming,

P1  
a first processor means operatively connected to said  
plurality of detector means for identifying each detected  
15 control signal as having been detected by a particular detector  
means,

P1  
a storage means for receiving and storing said  
detected control signals, and

P1  
a second processor means for controlling the output  
20 directing function of said switch means.

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2. In a signal processing system,

P1  
a plurality of receiver/distribution means for  
receiving programming from a program source and for inputting  
said programming to a switch means and a plurality of detector  
25 means,

P1  
a switch means for receiving output from said  
plurality of receiver/distribution means, said switch means  
being capable of outputting a selected portion of said  
programming received from one or more said

30 receiver/distribution means to a device for further processing,

P1  
a plurality of detector means for detecting control  
signals respecting said programming,

P1  
a first processor means operatively connected to said  
plurality of detector means for identifying each detected  
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control signal as having been detected by a particular detector means,

a buffer/memory storage means for receiving and storing said detected control signals, and

a second processor means for controlling the output function of said switch means.

3. In a signal processing system,

a receiver/distributor means for receiving programming from a plurality of program sources and for transmitting said programming to a matrix switch means,

a matrix switch means for receiving said programming from such a receiver/distributor means and for directing selected portions of said received programming to one or more output devices,

a plurality of detector means for detecting control signals respecting said programming, each detector means being configured to detect said control signals in a predetermined frequency range or at a predetermined location within said programming,

a processor means operatively connected to said plurality of detector means for adding data to said control signals identifying each control signal as having been detected by a particular detector means,

a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

a processor means for controlling the directing function of said matrix switch and the transfer function of said storage/transfer means.

4. In a signal processing system,

a receiver/distributor means for receiving programming from a plurality of program sources and for outputting said programming to a matrix switch means,

a matrix switch means for receiving said programming from such a receiver/distributor means and for outputting

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selected portions of said received programming to one or more output devices for further processing or recording,

5 a plurality of detector means for detecting control signals respecting said programming, each detector means being configured to detect said control signals in a predetermined frequency range or at a predetermined location within said programming,

P<sub>1</sub>  
10 a processor means operatively connected to said plurality of detector means for adding data to said control signals identifying each control signal as having been detected by a particular detector means,

P<sub>1</sub>  
a buffer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

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15 a processor means for controlling the output function of said matrix switch and the transfer function of said buffer means.

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5. In a signal processing system,

20 a receiver/distribution means for receiving programming from a plurality of program sources and for outputting said programming to a matrix switch means and a control signal detector means,

P<sub>1</sub>  
25 a matrix switch means for receiving said programming from said receiver/distributor means and for outputting selected portions of said received programming to a recording device operatively connected to a broadcast transmission means, a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal  
30 detector means being configured to detect said control signals in a predetermined frequency range or at a predetermined location within said programming,

P<sub>1</sub>  
35 a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

P<sub>1</sub>  
a processor means for controlling the output functions of said matrix switch means and the transfer functions of said storage/transfer means.

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6. In a signal processing system,  
a receiver/distribution means for receiving programming from a plurality of program sources and for outputting said programming to a matrix switch means and a control signal detector means,

P<sub>1</sub> 10  
a matrix switch means for receiving said programming from said receiver/distributor means and for outputting selected portions of said received programming to a broadcast transmission means and/or a recording device operatively connected to said broadcast transmission means,

P<sub>1</sub> 15  
a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector means being configured to detect said control signals in a predetermined frequency range or at a predetermined location within said programming,

P<sub>1</sub> 20  
a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

P<sub>1</sub> 25  
a processor means for controlling the output functions of said matrix switch means and the transfer functions of said storage/transfer means.

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7. In a signal processing system,  
a receiver/distribution means for receiving programming from a plurality of program sources and for outputting said programming to a matrix switch means and a control signal detector means,

P<sub>1</sub> 30  
a matrix switch means for receiving said programming from said receiver/distributor means and for directing selected portions of said received programming to a broadcast transmission means,

P<sub>1</sub> 35  
a control signal detector means for detecting control

signals respecting said programming and transferring said control signals to storage/transfer means, said control signal detector means being configured to detect said control signals in a predetermined frequency range or at a predetermined location within said programming,

a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means.

8. In a signal processing system,

a receiver/distribution means for receiving data from a plurality of data sources and for directing said data to a matrix switch means and a control signal detector means,

a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a processor means,

a control signal detector means for detecting switch control signals respecting said data and transferring said switch control signals to a storage/transfer means, said switch control signal detector means being configured to detect said switch control signals in a predetermined frequency range or at a predetermined location within said data as received from said data sources,

a storage/transfer means for receiving and storing said switch control signals and for transferring at least a portion of said switch control signals for further processing, and

a processor means for receiving and processing said switch control signals, controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer.

9. In a multichannel television distribution system, a receiver/distributor means for receiving television

programming from a plurality of program sources and directing said programming to a matrix switch means and a control signal detector means,

a matrix switch means for receiving said programming

5 from said receiver/distribution means and for directing selected portions of said received programming to a recording device operatively connected to a multichannel television distribution means,

P<sub>1</sub>  
10 a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector means being configured to detect said control signals in a predetermined frequency range or at predetermined locations within said programming,

P<sub>1</sub>  
15 a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

P<sub>1</sub>  
20 a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means in response to said control signals or on local command.

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25 10. In a multichannel television distribution system, a receiver/distributor means for receiving television programming from a plurality of program sources and outputting said programming to a matrix switch means and a control signal detector means,

P<sub>1</sub>  
30 a matrix switch means for receiving said programming from said receiver/distribution means and for directing selected portions of said received programming to a multichannel television distribution means,

P<sub>1</sub>  
35 a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector means being configured to detect said control signals in a predetermined frequency range or at predetermined

locations within said programming,

a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means in response to said control signals or on local command.

11. In a multichannel television distribution system, a plurality of receiver/distribution means for receiving television programming from a plurality of program sources and directing said programming to a matrix switch means and a control signal detector and processor means,

a matrix switch means for receiving said programming from said plurality of receiver/distribution means and for directing selected portions of said received programming to a recording device operatively connected to a multichannel television distribution means,

a control signal detector and processor means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector and processor means being configured to detect said control signals in specified frequency ranges or at specified locations within said programming, said control signal detector and processor means controlling the particular ranges and locations wherein said control signals are detected,

a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means in response to said control signals or local command.

12. In a multichannel television distribution system,

P<sub>1</sub>  
a plurality of receiver/distribution means for receiving television programming from a plurality of program sources and outputting said programming to a matrix switch means and a control signal detector and processor means,

P<sub>1</sub> 5 a matrix switch means for receiving said programming from said plurality of receiver/distribution means and for outputting selected portions of said received programming to a multichannel television distribution means,

P<sub>1</sub> 10 a control signal detector and processor means for detecting control signal respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector and processor means being configured to detect said control signals in specified frequency ranges or at specified locations within said  
15 programming, said control signal detector and processor means controlling the particular ranges and locations wherein said control signals are detected,

P<sub>1</sub> 20 a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and

P<sub>1</sub> a processor means for controlling the output functions of said matrix switch means and the transfer functions of said storage/transfer means in response to said control signals or local command.

P<sub>1</sub> 25 13. In a multichannel television distribution system, a receiver/distribution means for receiving television programming from a multichannel television transmission facility and outputting said programming to a matrix switch means and a control signal detector and processor means,

P<sub>1</sub> 30 a matrix switch means for receiving said programming from said receiver/distribution means and for outputting selected portions of said received programming to a multichannel television distribution means,

P<sub>1</sub> 35 a control signal detector and processor means for detecting control signals respecting said programming and



transferring said control signals to a buffer means, said control signal detector and processor means being configured to detect said control signals in specified frequency ranges or at specified locations within said programming, said control  
5 signal detector and processor means controlling the particular ranges and locations wherein said control signals are detected, a buffer means for receiving and storing said control signals and for transferring at least a portion of said control signals for further processing, and  
10 a processor means for controlling the output functions of said matrix switch means and the transfer functions of said buffer means in response to said control signals.

14. In a signal processing system,  
a receiver/distribution means for receiving  
15 programming from a program source and for outputting said programming to a matrix switch means and a control signal detector means,

a matrix switch means for receiving said programming from said receiver/distributor means and for directing selected  
20 portions of said received programming to a television signal transmission means,

a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a buffer means, said control signal detector  
25 means being configured to detect said control signals at a predetermined location within said programming,

a buffer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and

a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said buffer means based on instructions contained  
30 in said control signals.

15. In a signal processing system,  
a receiver/distribution means for receiving data from  
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a data source and for outputting said data to a matrix switch means and a control signal detector means,

P<sub>1</sub>  
5 a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,

P<sub>1</sub>  
10 a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,

P<sub>1</sub>  
a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and

P<sub>1</sub>  
15 a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

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20 16. In a multichannel television distribution system, a receiver/distributor means for receiving television programming from a program source and directing said programming to a matrix switch means and a control signal detector means,

P<sub>1</sub>  
25 a matrix switch means for receiving said programming from said receiver/distribution means and for outputting selected portions of said received programming to a television transmission means,

P<sub>1</sub>  
30 a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector means being configured to detect said control signals at predetermined locations within said programming,

P<sub>1</sub>  
35 a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further

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processing, and

a processor means for controlling (1) the <sup>output</sup>~~out-put~~ functions of said matrix switch means in response to said control signals, (2) the transfer functions of said storage/transfer means and (3) the predetermined locations within said programming wherein said control signals are detected.

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10 17. In a multichannel television distribution system, a receiver/distributor means for receiving television programming from a program source and directing said programming to a matrix switch means and a control signal detector means,

P1  
15 a matrix switch means for receiving said programming from said receiver/distribution means and for outputting selected portions of said received programming to a recording device operatively connected to a television transmission means,

P1  
20 a control signal detector means for detecting control signals respecting said programming and transferring said control signals to a storage/transfer means, said control signal detector means being configured to detect said control signals at predetermined locations within said programming,

P1  
25 a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and

PAB  
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L  
30 a processor means for controlling (1) the <sup>output</sup>~~out-put~~ functions of said matrix switch means in response to said control signals, (2) the transfer functions of said storage/transfer means and (3) the predetermined locations within said programming wherein said control signals are detected.

35 18. A method of communicating data in a system that consists of a plurality of transmission means, a plurality of detectors, a plurality of processors, a switch with means to communicate selected transmissions to selected processors, and

a control processor with capacity for controlling the output of said switch, said system being programmed to detect detector identification information and at least some of said detectors being programmed to combine control signal information,

5 consisting of the steps of:

$P_1$  transmitting data in a selected transmission,  
 $P_1$  transmitting to said control processor a control signal that causes said processor to control said switch,

10  $P_1$  detecting said control signal at a selected detector,  
detecting the identification of said selected detector,  
combining for transmission to said control processor information of said control signal and said detector identification, and

15  $P_1$  causing said control processor to transmit control information to said switch

$P_1$  thereby to cause said switch to output at least a portion of said selected transmission to at least one selected processor.

*Sub A1*  
20 19. In a method of communicating data in a system that consists of a plurality of transmission means, a plurality of detectors, a plurality of processors, a switch with means to communicate selected transmissions to selected processors, and a control processor with capacity for controlling the output of said switch, wherein at least some of said detectors are  
25 programmed to combine control signal information for transmission to said control processor and to transmit detector identification information, consisting of the steps of:

*MP*  
30 transmitting data in a selected transmission,  
transmitting to said control processor that causes said control processor a control signal to control said switch, and

35 thereby causing a selected detector to combine information for transmission to said control processor of said control signal and detector identification information, said control processor to transmit control information to said

switch, and said switch to input data of said selected transmission to at least one selected processor.

20. A method according to either claim 18 or claim 19 including the additional step of programming said systems to detect detector identification information.

21. A method of communicating television programming in a system that consists of a transmission station and a plurality of receiving stations, each receiving station having at least one detector, one video recorder and one video player with at least one of said detectors pre-programmed to detect distance information, consisting of the steps of:

transmitting a plurality of units of television programming,

causing a selected receiving station to record a selected television program unit,

causing said selected receiving station to position the start of said program unit at the play head of a video player, and

causing said video player thereafter to play and transmit at a selected time

thereby to cause said selected receiving station to transmit said selected unit at said selected time.

22. A method of communicating television programming in a multichannel television system that consists of a transmission station and a plurality of receiving stations, each receiving station having at least one detector, one video recorder and one video player with at least one of said detectors pre-programmed to detect distance information, consisting of the steps of:

transmitting a plurality of units of television programming,

causing a selected receiving station to record a selected television program unit,

causing said selected receiving station to position the start of said program unit at the play head of a video

player, and

causing said video player thereafter to play and transmit at a selected time

thereby to cause said selected receiving station to transmit said selected unit at said selected time.

23. A method of processing data in a system that consists of a first input means, at least one intermediate input means, and a plurality of processors consisting of the steps of:

transmitting a plurality of data units, causing memory means associated with a selected intermediate input means to record a selected data unit, and

causing said memory means to transmit selected information of said selected data unit at a selected time,

thereby to cause said intermediate input means to input data of said selected data unit to at least one selected processor at said selected time and cause said processor to process said input data.

24. A method of processing data in a system that consists of a first input means, at least one intermediate input means, and a plurality of processors consisting of the steps of:

transmitting a plurality of data units, causing recorder means associated with a selected intermediate input means to record a selected data unit, and causing a switch associated with said intermediate input to connect the output of a player associated with said recorder to at least one selected processor at a selected time, thereby to cause said selected processor to process data of said selected data unit at said selected time. unit,

25. A method of communicating television programming in a system that consists of a transmission station and a plurality of receiving stations, each receiving station having at least one detector, one <sup>one matrix switch,</sup> video recorder and one video player

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P<sub>1</sub> with at least one of said detectors pre-programmed to detect program identification information, consisting of the steps of:

transmitting programming in a selected television transmission,

5 transmitting a control signal to said control processor that causes said control processor to control said matrix switch, detecting said control signal at a selected detector, combining for transmission to said information of said control signal and said detector identification  
10 information and

P<sub>1</sub> causing said control processor to transmit control information to said switch

2 thereby to cause said switch to direct the programming of said selected transmission to at least one selected  
15 processor.

26. A method of communicating television programming in a system that consists of a transmission station and a plurality of receiving stations, each receiving station having at least one detector, one video recorder and one video player  
20 with at least one said detectors pre-programmed to detect program identification information, consisting of the steps of:

P<sub>1</sub> transmitting a plurality of units of television pre-programming containing embedded program identification information,

P<sub>1</sub> 25 causing a selected receiving station to record a selected television program unit,

P<sub>1</sub> causing said station to position the start of said program unit at the play head of a video player,

P<sub>1</sub> causing said player thereafter to play and transmit at  
30 a selected time

P<sub>1</sub> thereby to cause said selected station to transmit said selected unit at said selected time.